Gulf of Mexico Harmful Algal Bloom Bulletin

7 December 2006

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 4, 2006

Conditions Report

A harmful algal bloom has been identified from southern Pinellas to northern Lee County. Very low impacts are possible in northern Sarasota and southern Charlotte County through Sunday. No impacts are expected in any other county through Sunday; however the potential for impacts may be greater in bay and sound regions on Thursday and Friday due to strong winds.

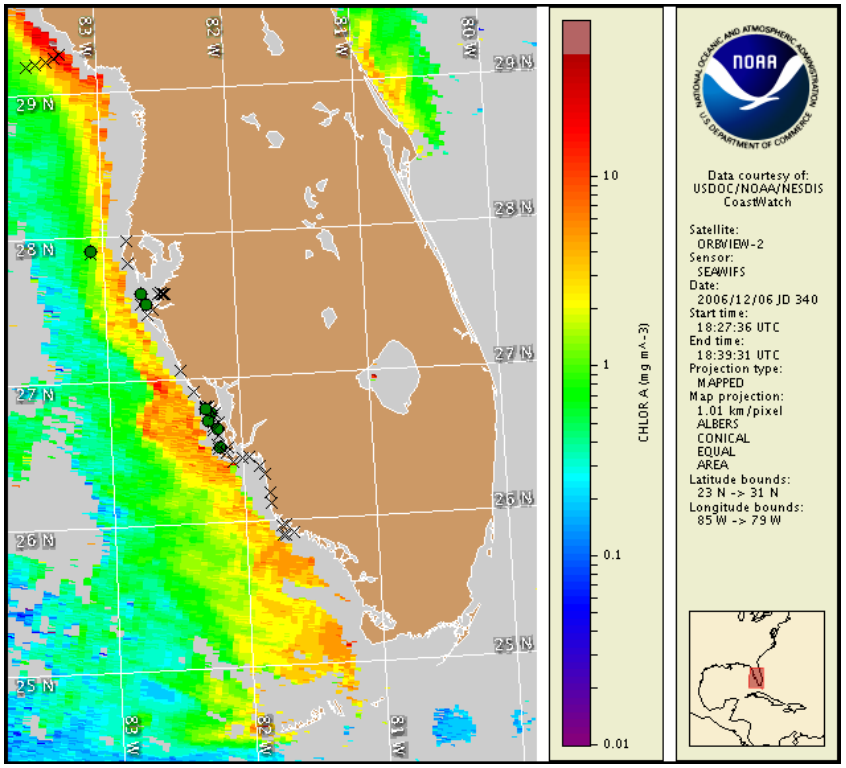
Analysis

A harmful algal bloom persists along the SW Florida coast from southern Pinellas to northern Lee Counties. Although the bloom appears to be continually dissipating along the shoreline according to both sampling and satellite imagery over the past two weeks, higher concentrations of *K. brevis* have been identified in offshore regions. Medium to high concentrations of *K. brevis* have been confirmed 5-9nm offshore southern Sarasota County and 22nm offshore southern Charlotte County. Low concentrations have additionally been identified 5-15nm offshore Boca Grande, northern Lee County (FWRI, 11/29). Alongshore, *K. brevis* has been identified over the past 10 days in very low concentrations at Skyway Fishing Pier and the Gasparilla/Pine Island Sound region; low concentrations near New Pass, northern Sarasota County; and medium concentrations at Gasparilla Pass, southern Charlotte County. Recent satellite imagery has been predominately obscured by clouds. A small patch of elevated chlorophyll (up to 10μg/L) is visible offshore southern Collier County at 25°47.4'N, 81°44.4'W. Bloom movement has likely been minimal since 12/4.

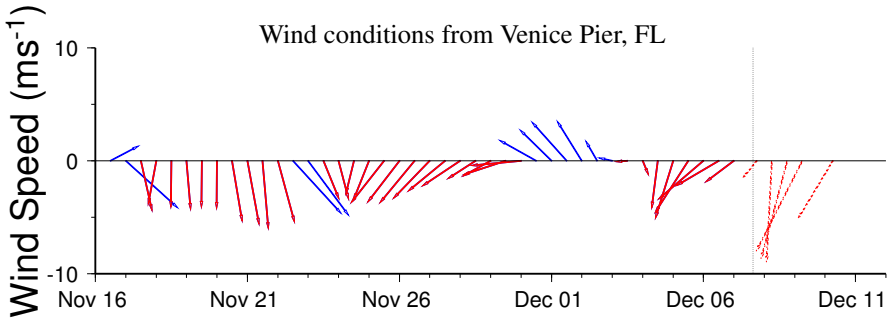
Strong northerly to northeasterly winds forecasted today and tomorrow will promote southwesterly transport of the bloom in offshore portions, and may increase impacts in bay and sound regions where *K. brevis* continues to be identified.

*Please Note: Due to technical difficulties the chlorophyll imagery shown on the first and second page of this bulletin is from11/30, not 12/6. A supplemental email including recent imagery from 12/6 will be sent following the distribution of this bulletin. We are currently working on a solution to this problem.

~Fisher, Keller

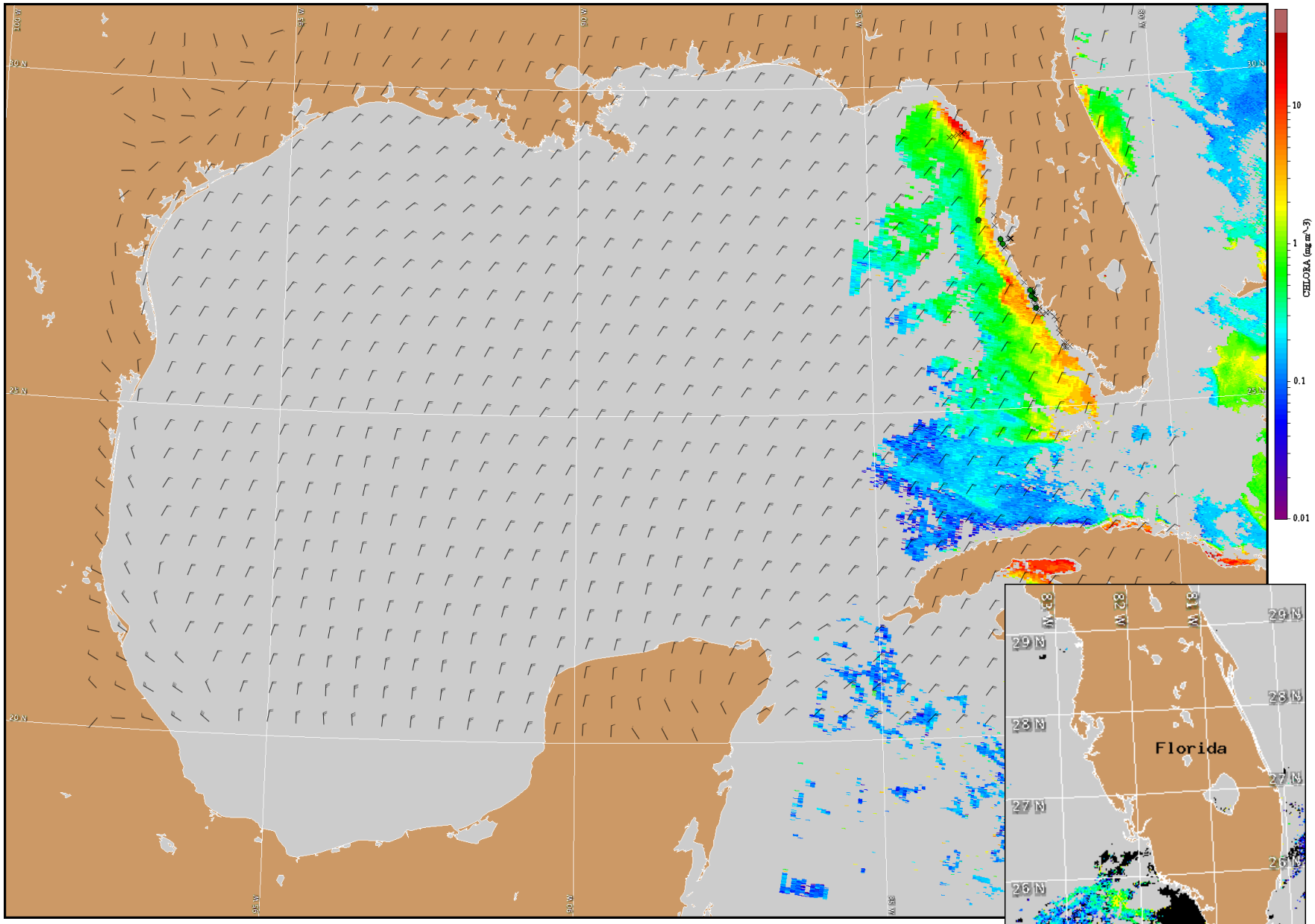


Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration categories and corresponding cell count values from Florida Fish and Wildlife Research Institute. For a key to the cell concentration descriptions, visit http://research.myfwc.com.Cell concentration sampling data from November 27-December 6 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northeasterly winds today will strengthen to 20-25kts (10m/s) by tonight and shift northerly. Northeasterlies expected Friday (20kts) and Saturday (15kts; 8m/s). Easterly winds expected on Sunday and Monday (10-15kts; 5-8m/s).



Satellite chlorophyll image and forecast winds for December 8, 2006 12Z with cell concentration sampling data from November 27-December 6 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).